

SUBSTITUTE SPECIFICATION

F-7296

Ser. No. 10/060,588

Abstract

A biodegradable polymer composition having good resistance to thermal decomposition, wherein it is possible to control the weight-average molecular weight to within 30 % of the initial molecular weight after molding and radiation sterilization, by adding a free radical scavenger to the biodegradable polymer.

Biodegradable polymer compositions of the invention, which withstand thermal and radiation decomposition are effective for medical and many industrial uses. Moreover, this inventive method is applicable for the treatment of many non-biodegradable polymers such as nylon or polypropylene which are subjected to thermal casting and radiation sterilization.